

| PGE Number Priority | Integration Testing at the SCF (% complete/ date completed) | Verification at the SCF (% complete/ date completed) | Delivery to CM (% complete/ date completed) | ASDC Promoted to Production | Comments |
|---|---|---|--|-----------------------------------|--|
| Build 1 -- NCT#3 Support | | | | | |
| CER1.0P2 -- New RDR L0 | 11/18/2008 (100%/05/2009) | 1/15/2009 (05/2009) | 2/1/2009 (05/2009) | | <p>Expected to be completed earlier than the larger CER1.1P8 software 10/21/08: Sample RDRs from IDPS expected in late Oct, with proxy filled RDRs due to show up in Nov. 11/18/08: Waiting for Zero-fill and proxy data to complete this effort. 12/02/08: Zero-fill proxy data received, however there are problems in this data that should be fixed in the actual proxy data, which should be received as soon as it is available and released by Raytheon. 12/17/08: Waiting for actual proxy data to complete updates and testing. 01/14/09: Proxy data RDRs have been received and testing with this data is now occurring. 1/28/09: Code moved to <i>magneto</i> for testing. An issue with the gcc compiler was discovered and will be tested when Ashley returns to work from sick leave. 04/22/09: This PGE will be redelivered on 4/24/09. This will update filenames as requested by ASDC. 06/17/09: The PGE has been delivered and is now in SSIT testing. 07/15/09: Waiting for the PGE to be promoted.</p> |
| Scripts | 11/15/2008 (100%/05/2009) | 1/15/2009 (05/2009) | 2/1/2009 (05/2009) | | <p>12/17/08: Work has begun on creating the scripts to run the new RDR preprocessor. Work will be completed once we have actual proxy RDRs. 01/14/09: Discussions with the ASDC Ingest personnel about how to create the PCF scripts, since there are 132 input RDRs per run. 06/17/09: The PGE has been delivered, updates to the script have been requested and those updates have been made and sent onto SSIT. 07/15/09: Waiting for PGE to be promoted.</p> |
| CERESlib C- Metadata | 9/15/2008 (>75%) | 1/15/2009 | 2/1/2009 | | <p>Expected to be completed earlier than the larger CER1.1P8 software 04/22/09: C-version of the Metadata is being worked and integrated with PGE CER1.1P8, however this will not be part of the Build1 delivery, because it is not yet ready.</p> |
| Test Plans & other documentation | N/A | 1/15/2009 (06/2009) | 2/1/2009 (06/2009) | | <p>Expected to be completed earlier than the larger CER1.1P8 software 04/22/09: The Test Plan and Operator's Manual have been updated with preliminary information for CER1.1P8. These preliminary updates will be edited for Build1 to highlight the Build1 functionality. 06/17/2009: Minor update to the Test Plan and Ops manual have been made for CER1.0P2.</p> |

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| CER1.1P8 -- NPP C++ Level-0 processor | 1/15/2009 (100%) | 2/15/2009 (06/2009) | 3/1/2009 (06/2009) | | <p>Rel1 to include the following functionality -- Read NPP L0, process instrument parameters necessary for geolocation and radiance conversion, conversion of counts to radiance, output of time, raw and drift correct radiance counts, co-lat and long, with some QC reports 10/06/08: Some re-work was found to be necessary due to the Toolkit requiring C-arrays that were initially defined as C++ vectors. 12/02/08: Code is now being integrated and tested to ensure that all the converted code will work together. These are initial tests and there is still a lot of testing left to do before it will be certified as deliverable. 01/14/09: Level-0 read routines are being tested along with the production QC reports. So far testing is going well with a few bugs being found and fixed along the way. 01/28/09: Integration testing of the preliminary version for Build1 continues. Work to clear up reading the Level-0 data properly in C++ are being worked. 04/22/09: Build1 should be delivered on 4/24/09. 06/17/09: Software is now in SSIT for operational testing. 07/15/09: Operational testing has discovered a problem with the pls.pl script not being in the correct place on magneto, which has been fixed. A change to the ceres-env.csh script was also made to set the Ada environment variables to blank, to allow all instrument scripts to work on all platforms.</p> |
| CER1.2P1 -- Pre-ES8 generator | 9/15/2008 | 2/15/2009 (100%/05/2009) | 4/22/2009 (100%/06/2009) | | <p>Minimal changes anticipated to existing C-code 04/22/09: Updates to the ASCII and PCF generators to support NPP will be delivered on 5/1/09. 06/17/09: Delta delivery to update PCF generator for NPP support has been made.</p> |
| Scripts | 1/15/2009 (100%) | 2/15/2009 (05/2009) | 3/1/2009 (06/2009) | | 04/22/09: Scripts to support NPP-FM5 for CER1.2P1, CER1.1P7 and CER1.1P8 have been updated/created. |
| Test Plans & other documentation | N/A | 2/1/2009 (06/2009) | 3/1/2009 (06/2009) | | <p>Updates may or may not be required for this to the documentation. 04/22/09: Test Plan and Ops Manual have been updated for PGE CER1.1P7 and CER1.1P8. 06/17/09: Updates to the Test Plan and Ops Manual for CER1.1P7 & CER1.1P8 were made as requested by SSIT.</p> |
| Build 2 -- PreLaunch Freeze | | | | | |

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| CER1.2P1 -- Pre-ES8 generator | 6/15/2009 | 8/15/2009 | 10/15/2009 | | Fully functional support for Terra/Aqua and NPP 07/29/09: Code works with all instruments, however updates to allow the code to work on all platforms are still being worked. As soon as the x86 platforms are available work can be completed. |
| CER1.0P2 -- Updated RDR L0, eph/att | 6/15/2009 | 8/15/2009 | 10/15/2009 | | Update as necessary after NCT#3 testing. This may include bug fixes or changes in RDR format from the documented formats. 07/29/09: Latest data from the IDPS cannot be read by the preprocessor. Attemping to get the existing dataset reprocessed on the new IDPS system to see if the problem that exists is the simulated data or a change in data format. |
| Test Plans & other documentation | N/A | 9/15/2009 | 10/15/2009 | | Updates may or may not be required for this to the documentation. |
| CER1.1P8 | 10/15/2009 | 11/30/2009 | 12/1/2009 | | Fully functional support for Terra/Aqua and NPP 07/29/09: Work continues to complete the conversion of the instrument health and status parameters along with the HDF write routines for BDS and IES. |
| Test Plans & other documentation | N/A | 11/30/2009 | 12/1/2009 | | Updates may or may not be required for this to the documentation. |
| Build 3 | | | | | |
| CER1.4P1 -- BDSI Subsetter | TBD | TBD | TBD | | Work will not begin on this PGE until after all updates to support NPP launch have been completed 01/28/09: Work on conversion of this PGE to C++ has begun. This PGE allows for the testing of the HDF read and write routines for the BDS without interference with the integration efforts for CER1.1P8. 04/22/09: This PGE should be completed and ready for delivery by 5/6/09. 07/15/09: Waiting for completion of C-version of Metadata routines before this PGE can be completed. |
| CER1.4P2 -- Gain Analyzer | TBD | TBD | TBD | | Work will not begin on this PGE until after all updates to support NPP launch have been completed 04/22/09: Conversion of this PGE has begun. |
| CER1.4P3 -- BDS Edition2/3 processor | TBD | TBD | TBD | | Work will not begin on this PGE until after all updates to support NPP launch have been completed |
| Test Plans & other documentation | N/A | TBD | TBD | | Updates may or may not be required for this to the documentation. |
| Build 4 -- Post Launch Edition1 Updates | | | | | |
| CER1.1P8 | Launch+5 | Launch+7 | Launch+9 | | Updates to ancillary data and possible problems found on orbit |

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| CER1.2P1 | Launch+5 | Launch+7 | Launch+9 | | Updates to ancillary data and possible problems found on orbit |
| CER1.4P1 | Launch+5 | Launch+7 | Launch+9 | | Updates to any ancillary data files and any problems found with updates to support NPP |
| CER1.4P2 | Launch+5 | Launch+7 | Launch+9 | | Updates to any ancillary data files and any problems found with updates to support NPP |
| CER1.4P3 | Launch+5 | Launch+7 | Launch+9 | | Updates to any ancillary data files and any problems found with updates to support NPP |
| Test Plans & other documentation | N/A | TBD | TBD | | Updates may or may not be required for this to the documentation. |

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| CER1.1P1-6 | New IBM Platform | Code for delivery for SCCR#610 can support this effort. (1 - 50%) | Ready for port to new platform 6/26/08 | Supported by existing delivery for SCCR #610, new expected output would need to be provided. | | <p>Code supports Terra and Aqua Ops on the Target Machine. Requires Ada compiler, Toolkit, CERESlib and possible new C-version of CERESlib Metadata.</p> <p>9/22/08: New platform is available. Work to transfer over existing code and compile the main subsystem will begin this week.</p> <p>10/08/08: Work to get the correct set up for CERESlib, etc. has begun. Currently still working to compile all of the code.</p> <p>11/18/08: Ada compiler requires 32-bit TK, waiting for it to be completed.</p> <p>12/02/08: No updates at this time for this PGE. Waiting for confirmation that the 32-bit TK has been built and that CERESlib has also been built and tested under the 32-bit TK.</p> <p>12/17/08: GNAT Ada compiler installed on asdcsm1. Successful compilation of the subsystem has occurred, however a problem with an HDF routine has been discovered and is now being investigated.</p> <p>01/14/09: A problem with the Toolkit on the x86 was discovered. This is a problem that was found when testing on the SCF machines. A fix for this problem was developed by Kam-Pui Lee and implemented by Scott Zentz at the SCF, however, it appears to be missing from the x86 version of the Toolkit. A successful run of PGE CER1.3P1 has been done, however a problem with the HDF compression was discovered.</p> <p>01/28/09: Continue work to port the system to the x86. Work is currently focused on reading the Level-0 data in a little-endian environment.</p> <p>04/22/09: Awaiting an update to the existing Toolkit on the x86 to fix an issue with writing metadata to HDF files. This is currently being worked.</p> <p>06/17/09: Waiting for x86 processors to become available.</p> |

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| CER1.2P1 (already in C) | New IBM Platform | 6/26/2008 (100%) | Ready for port to new platform 6/26/2008 | Supported by existing delivery for SCCR #610, new expected output would need to be provided. | | <p>Code is already in C and a run of this code supporting Terra and Aqua can be performed whenever the new system is available. It may be possible to update the code to use the new C-version of CERESlib Metadata if it is available before the new system is ready for testing.</p> <p>9/22/08: New platform is available. Work to transfer over the existing code and compile this PGE will begin this week.</p> <p>10/21/08: The code has been compiled and run on the x86 testbed, however the output products do not match expected results and may be due to little-endian. This effort has been put on hold to play with the Ada compiler on the x86 platform.</p> <p>12/17/08: Updates to do a byte-swap on a Pre-ES8 have been made on asdcsm1 and the data has been found to be scientifically equivalent to data created on warlock.</p> <p>01/14/09: A routine to byte-swap the output Pre-ES8 has been written and the data compared to results created on warlock. The files were found to be identical once the byte-swap routine had been run. It may mean that a post-processor may need to be added to the software for this platform.</p> <p>06/17/09: Waiting for new x86 platform to become available.</p> |

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| CER1.3P1 | New IBM Platform | Code for delivery for SCCR#610 can support this effort. | Ready for port to new platform 6/26/08 | Supported by existing delivery for SCCR #610, new expected output would need to be provided. | | Code supports Terra and Aqua Ops on the Target Machine. Requires Ada compiler, Toolkit, CERESlib and possible new C-version of CERESlib Metadata. 9/22/08: New platform is available. Work to transfer over the existing code and compile this PGE will begin this week. 12/17/08: GNAT Ada compiler installed on asdcsm1. Successful compilation of the subsystem has occurred, however a problem with an HDF routine has been discovered and is now being investigated. 01/14/09: A successful run of PGE CER1.3P1 has been done, however a problem with the HDF compression was discovered. This problem may be related to the Toolkit problem above (CER1.1P1-6) and that should be fixed before deciding that the problem lies in the compression software. 06/17/09: Waiting for new x86 platform to become available. |
| CER1.3P2 | New IBM Platform | Code for delivery for SCCR#610 can support this effort. | Ready for port to new platform 6/26/08 | Supported by existing delivery for SCCR #610, new expected output would need to be provided. | | Code supports Terra and Aqua Ops on the Target Machine. Requires Ada compiler, Toolkit, CERESlib and possible new C-version of CERESlib Metadata. 9/22/08: New platform is available. Work to transfer over the existing code and compile this PGE will begin this week. 06/17/09: Waiting for new x86 platform to become available. |
| CER1.3P3 | New IBM Platform | Code for delivery for SCCR#610 can support this effort. | Ready for port to new platform 6/26/08 | Supported by existing delivery for SCCR #610, new expected output would need to be provided. | | Code supports Terra and Aqua Ops on the Target Machine. Requires Ada compiler, Toolkit, CERESlib and possible new C-version of CERESlib Metadata. 9/22/08: New platform is available. Work to transfer over the existing code and compile this PGE will begin this week. 06/17/09: Waiting for new x86 platform to become available. |
| Updates to Test Plan/Ops Manual | New IBM Platform | TBD | TBD | TBD | | Update to add information needed for CM and SIT to test on the new IBM Platform |

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| CER1.1P1-7 | Warlock/New IBM Platform | 10/15/2008 (>75%) | 11/15/2008 | 1/15/2009 | | Code would support Terra/Aqua and NPP. Updates to include new C-version of CERESlib Metadata and changes to allow support of NPP-FM5. 10/21/08: Updates to run the FM5 calibration data have been started and are now being tested. Tests are currently failing and investigation into the failure is being done now. 04/22/09: Delivery of this PGE to CERES CM for <i>warlock</i> was completed and the software has been released to SIT at ASDC. 06/17/09: Delivered to <i>warlock</i> , updated instrument code needed to fully complete software. Waiting for x86 availability to test on new platform. |
| CER1.2P1 (already in C) | Warlock/New IBM Platform | 10/15/2008 | 11/15/2008 | 1/15/2009 | | Code would support Terra/Aqua and NPP. Updates to include new C-version of CERESlib Metadata and changes to allow support of NPP-FM5. |
| Updates to Test Plan/Ops Manual | New IBM Platform | TBD | TBD | TBD | | Update to add information needed for CM and SIT to test on the new IBM Platform 04/22/09: Updated Test Plan and Ops Manual have been sent to CERES CM and SIT at ASDC. |

NOTE: The first two PGEs listed above would be existing versions of the Terra/Aqua code and would be ready for testing on the new platform as soon as it has been configured for this testing. The second two PGEs would be modified to support NPP-FM5, which should only require minor updates to each PGE.